

REMARKS

The Office Action dated April 19, 2006, has been received and carefully considered. In this response, claim 10 has been amended. Entry of the amendments to claim 10 is respectfully requested. Reconsideration of the outstanding rejections in the present application is also respectfully requested based on the following remarks.

I. THE ALLOWANCE OF CLAIMS 1-9 AND 19-26

Applicant notes with appreciation the indication on page 6 of the Office Action that claims 1-9 and 19-26 have been allowed.

II. THE ANTICIPATION REJECTION OF CLAIMS 10, 12-16, AND 18

On pages 2-4 of the Office Action, claims 10, 12-16, and 18 were rejected under 35 U.S.C. § 102(a) as being anticipated by Rajagopalan et al. (IP Over Optical Networks: Architectural Aspects, IEEE Communications Magazine, September 2000). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose,

either expressly or under the principles of inherency, each and every element of the claimed invention. Id.. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). Such possession is effected only if one of ordinary skill in the art could have combined the disclosure in the prior art reference with his/her own knowledge to make the claimed invention. Id..

Regarding claim 10, the Examiner asserts that Rajagopalan et al. discloses the claimed invention. However, its is respectfully submitted that Rajagopalan et al. fails to disclose registering photonics network nodes at an O-UNI server by collecting information about each photonics network node, storing information pertaining to each registered photonics network node at the O-UNI server, and instructing photonics network switches from the O-UNI server upon verifying compatibility of first and second registered photonics network nodes to search for an end-to-end wavelength path and establish

the connection between the first and second registered photonics network nodes, as presently claimed.

Specifically, the Examiner asserts that Rajagopalan et al. discloses instructing photonics network switches upon verifying compatibility of first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first and second registered photonics network nodes, by disclosing "route computation with constraints." However, it is respectfully submitted that this disclosure by Rajagopalan et al. in no way discloses, or even suggests, instructing photonics network switches from the O-UNI server upon verifying compatibility of first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first and second registered photonics network nodes, as presently claimed. In contrast, Rajagopalan et al. merely discloses that "a request to establish a lightpath may originate from an IP router" and "be sent to the OXC [optical cross connect] that contains the source port." Rajagopalan et al. also discloses that "[t]he OXC is then responsible for computing the route and establishing the path." Indeed, Rajagopalan et al. goes on to disclose that "the computation of" the path "may be based on algorithms . . . executed by the source OXC." This clearly

differs from instructing photonics network switches from the O-UNI server upon verifying compatibility of first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first and second registered photonics network nodes, as presently claimed. Additionally, even though Rajagopalan et al. discloses the possibility of route computation in a route server, this disclosure does not encompass instructing photonics network switches from the O-UNI server to search for an end-to-end wavelength path, as presently claimed. In contrast, such a disclosure teaches away from the claimed inventions by explicitly requiring the single route server to compute a path rather than instructing photonic network switches to search for such a path, as presently claimed.

At this point it should be noted that Rajagopalan et al. also fails to disclose registering photonics network nodes at the O-UNI server by collecting information about each photonics network node, and storing information pertaining to each registered photonics network node at the O-UNI server, as presently claimed, because Rajagopalan et al. merely discloses "a route server that has complete knowledge of link state and path routes." However, knowledge of link state and path routes does not imply information about each photonics network node as

the Examiner asserts, but rather only indicates knowledge of how nodes are interconnected. Also, knowledge of link state and path routes does not imply actually registering photonics network nodes at an O-UNI server, as presently claimed.

In view of the foregoing, it is respectfully submitted that Rajagopalan et al. does not disclose, or even suggest, the limitations of claim 10. Accordingly, it is respectfully submitted that claim 10 should be allowable over Rajagopalan et al..

Regarding claims 12-16 and 18, these claims are dependent upon independent claim 10. Thus, since independent claim 10 should be allowable as discussed above, claims 12-16 and 18 should also be allowable at least by virtue of their dependency on independent claim 10. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 10, 12-16, and 18 be withdrawn.

### III. THE OBVIOUSNESS REJECTION OF CLAIM 11

On page 5 of the Office Action, claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Rajagopalan et al.

(IP Over Optical Networks: Architectural Aspects, IEEE Communications Magazine, September 2000). This rejection is hereby respectfully traversed.

Claim 11 is dependent upon independent claim 10. Thus, since independent claim 10 should be allowable as discussed above, claim 11 should also be allowable at least by virtue of its dependency on independent claim 10. Moreover, claim 11 recites additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 11 be withdrawn.

#### IV. THE OBVIOUSNESS REJECTION OF CLAIM 17

On pages 5-6 of the Office Action, claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Rajagopalan et al. (IP Over Optical Networks: Architectural Aspects, IEEE Communications Magazine, September 2000) in view of Metz ("IP Over Optical: From Packets to Photons", IEEE Internet Computing, November-December 2000) and further in view of Zhang et al. ("Signaling Requirements at the Optical UNI", Internet Draft,

July 14, 2000). This rejection is hereby respectfully traversed.

Claim 17 is dependent upon independent claim 10. Thus, since independent claim 10 should be allowable as discussed above, claim 17 should also be allowable at least by virtue of its dependency on independent claim 10. Moreover, claim 17 recites additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 17 be withdrawn.

V. CONCLUSION

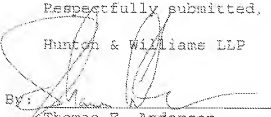
In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

Hunton & Williams LLP

By:   
Thomas E. Anderson  
Registration No. 37,063

TEA/vrp

Hunton & Williams LLP  
1900 K Street, N.W.  
Washington, D.C. 20006-1109  
Telephone: (202) 955-1500  
Facsimile: (202) 778-2201

Date: June 16, 2006